

REMARKS

The present invention relates to a method for molding an article specifically for underwater use. Such articles may be used by divers in the oil drilling and other industries.

The environment where these articles are used is often aggressive including high currents that can cause signs formed by the method of the present invention to be torn from the objects to which they are attached. Also, such signs can become encrusted with marine organisms making them difficult to read or even identify. In order to overcome the encrustation problem, the signs produced by the method of the present invention are molded from silicone having a very low friction and anti-fouling properties. However, the properties of silicone typically make it virtually impossible to directly attach the article to other structures.

The present invention overcomes this problem, of course, by providing attachment means with an irregular surface in contact with the silicone material. The mold is maintained in such an orientation while the material hardens and mechanically bonds to the attachment means so that the mold face is inclined to the horizontal at an angle at which the insert is retained against slipping by friction during the hardening of the material.

Claim 26 remains as the only independent claim in the instant application. In addition to correction to overcome the objections raised by the Patent Examiner, claim 26 has been amended to clarify that the article is intended for underwater use and that the molded material is a silicon material. Claim 26 has been further amended to clarify that the silicone material has a very low friction surface and anti-fouling properties.

The Patent Examiner, however, has rejected the previously submitted claims as unpatentably obvious over the Frost et al. reference with combined with Proos. However, in

view of Applicant's amendment to claim 26, Applicant respectfully submits that this basis for rejection can no longer stand.

More specifically, the Frost et al. reference admittedly discloses a method for molding a generally flat article. However, there is no suggestion in the Frost et al. reference that the article is designed for underwater use or that it is made from a silicone material. Furthermore, claim 26 has been carefully amended to more clearly define these aspects of the present invention.

Additionally, the Frost patent, as acknowledged by the Patent Examiner, fails to disclose an attachment means with an irregular surface in contact with the material. This, of course, is a key aspect of the present invention.

In order to meet this deficiency of Frost et al., the Patent Examiner further relies upon the Proos reference. However, the Proos patent is directed to an entirely different field than that of Frost since the Proos reference deals with a vehicle airbag molding, rather than a material for underwater use. Accordingly, there is no reason, other than hindsight, for one having ordinary skill in the art to combine the Frost et al. and Proos references together as suggested by the Patent Examiner.

Furthermore, none of the materials discussed in the Proos reference have a very low friction surface and anti-fouling properties as is now more clearly defined in claim 26. Instead, the polypropylene, polystyrene or rubber based materials disclosed in the Proos reference would not be optimal or even satisfactory for underwater use. Consequently, the Proos reference teaches absolutely nothing about attaching to a material having a very low friction surface and anti-fouling properties as in the present invention and as is now more clearly defined in claim 26.

Indeed, the method disclosed in Proos is the direct opposite to that of claim 26. In amended claim 26, the silicone material is introduced into the mold and then the attachment

means is provided to be in contact with that silicone based material. However, in the Proos reference, the leather material is first introduced into the mold cavity prior to the resinous plastic material being injected into the mold cavity. This, of course, is the reverse of Applicant's invention.

It is rudimentary in patent law that a modification to a prior art reference which renders it inoperable for its intended use cannot be obvious within the purview of 35 U.S.C. §103.

For all the foregoing reasons, Applicant respectfully submits that claim 26, as amended, patentably defines Applicant's invention over the prior art references of record. All remaining claims in the application depend from claim 26 and are, therefore, also allowable.

Such action is respectfully solicited.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 07-1180.

Dated: February 25, 2009

Respectfully submitted,

Electronic signature: /Douglas W. Sprinkle/
Douglas W. Sprinkle

Registration No.: 27,394
GIFFORD, KRASS, SPRINKLE, ANDERSON
& CITKOWSKI, P.C.
2701 Troy Center Drive, Suite 330
Post Office Box 7021
Troy, Michigan 48007-7021
(248) 647-6000
(248) 647-5210 (Fax)
Attorney for Applicant